<u>IN THE CLAIMS:</u>

        Please amend the claims as follows:

1-63 (Cancelled).

64. (Currently amended) A gateway for forwarding transmission information between a first terminal node of a first network and a second terminal node of an ad hoc network, wherein the first terminal node is addressable by a global source address and a second terminal node is addressable by an ad hoc destination address, the gateway comprising:

        a transmission/reception unit adapted to receive transmission information from said first terminal node and to transmit said transmission information to said second terminal node; and

        an acknowledgment information detection unit adapted to detect the receipt of acknowledgment information from said second terminal node acknowledging that said second terminal station has received said transmission information;

        wherein

        said transmission/reception unit comprises a first tunnel setup unit for setting up a first tunnel link between said gateway and said second terminal node by encapsulating a transmission packet received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet having an ad hoc source address of said gateway and an ad hoc destination address of said second terminal node, wherein said transmission/reception unit transmits said transmission information and receives said acknowledgment information to and from said second terminal node respectively through said first tunnel link.

65. (Previously presented) The gateway according to claim 64, characterized by an accounting unit adapted to determine charging information for the transmission of said transmission information to said second terminal node if said acknowledgment information detection unit detects the receipt of acknowledgment information for the transmission of said transmission information to said second terminal station.

66. (Previously presented) The gateway according to claim 64, characterized by a transmission information characteristics determining unit adapted to determine transmission characteristics of the transmission of said transmission information to said second terminal node.

67. (Previously presented) The gateway according to claim 64, characterized in that said transmission information characteristics determining unit is adapted to determine as said transmission characteristics one or more selected from the group consisting of a data amount, a transmission speed, a transmission route along which said transmission information has been transmitted to said second terminal node, and a delay time of the packet transmission.

68. (Previously presented) The gateway according to claim 64, characterized in that said second ad hoc network is a packet switched network, said transmission information comprises one or more transmission packets, and said acknowledgement information comprises one or more acknowledgment packets.

69. (Previously presented) The gateway according to claim 68, characterized by an acknowledgment request unit adapted to transmit to said second terminal node an acknowledgment request packet including a predetermined sequence number of a transmission packet which was transmitted but for which no acknowledgement information has as yet been detected by said acknowledgment information detection unit, said acknowledgment request message requesting from said second terminal node the transmission of an acknowledgment packet acknowledging the receipt of the transmission packet having said predetermined sequence number.

70. (Previously presented) The gateway according to claim 64, characterized by a route check unit adapted to detect whether a transmission route to said second terminal node exists.

71. (Currently amended) A first terminal node of an ad hoc network for exchanging transmission information with a second terminal node of another network connected to said ad hoc network through a gateway, wherein the first terminal node is addressable by an ad hoc destination address and the second terminal node is addressable by a global resource address, the first terminal node comprising:

a transmission/reception unit adapted to receive transmission information from said another terminal node through said gateway; and

an acknowledgment information transmission unit adapted to transmit to said gateway acknowledgment information acknowledging that said transmission/reception unit has received said transmission information; wherein

said transmission/reception unit comprise a first tunnel setup unit for setting up a first tunnel link between said second terminal node and said gateway by encapsulating a transmission packet received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet having an ad hoc source address of said gateway and an ad hoc destination address of said second terminal node, wherein said transmission/reception unit receives said transmission information and transmits said acknowledgment information from and to said gateway respectively through said first tunnel link.

72. (Currently amended) The first terminal node according to claim 71, characterized in that said ad hoc network is a packet switched network, said transmission information comprises one or more transmission packets, and said acknowledgement information comprises one or more acknowledgment packets.

73. (Currently amended) The first terminal node according to claim 71, characterized by a packet retransmission request unit adapted to transmit to said gateway a retransmission request packet including a sequence number of a transmission packet which is requested to be retransmitted from said gateway.

74. (Currently amended) A method for forwarding transmission information between a first terminal node of a first network of a communication system and a second terminal node of an ad hoc network of said communication system, wherein the first terminal node is addressable by a global source address and the second terminal node is addressable by an ad hoc destination address, the method comprising the following steps in a gateway of said communication system:

setting up a first tunnel link in the ad hoc network between said gateway and said second terminal node ~~by encapsulating a transmission packet received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet having an ad hoc source address of said gateway and an ad hoc destination address of said second terminal node~~ and further transmitting said transmission information and receiving said acknowledgment information to and from said second terminal node respectively through said first tunnel link;

receiving, in said gateway of said communication system, transmission information from said first terminal node and transmitting, from said gateway via the first tunnel link, said transmission information to said second terminal node; and

detecting, in said gateway, the receipt of acknowledgment information via the first tunnel link from said second terminal node acknowledging that said second terminal station has received said transmission information.

75. (Currently amended) A method for forwarding transmission information between a first terminal node of a first network of a communication system and a second terminal node of an ad hoc network of said communication system, wherein the first terminal node is addressable by a global source address and the second terminal node is addressable by an ad hoc destination address, the method comprising the following steps in said second terminal node:

setting up a first tunnel link in the ad hoc network between said gateway and said second terminal node ~~by encapsulating a transmission packet received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet having an ad hoc source address of~~

~~said gateway and an ad hoc destination address of said second terminal node,~~ and further

transmitting said transmission information and receiving said acknowledgment information to

and from said second terminal node respectively through said first tunnel link;

receiving, in said second terminal node via the first tunnel link, transmission information

from a gateway of said communication system; and

transmitting, from said second terminal node via the first tunnel link to said gateway,

acknowledgment information acknowledging that said second terminal node has received said

transmission information.

76. (Previously presented) The method according to claim 74, characterized by determining, in

said gateway, charging information for the transmission of said transmission information to said

second terminal node if the receipt of acknowledgment information for the transmission of said

transmission information to said second terminal station is detected.

77. (Previously presented) The method according to claim 74, characterized by determining

transmission characteristics of the transmission of said transmission information to said second

terminal node.

78. (Previously presented) The method according to claim 74, characterized by determining as

said transmission characteristics one or more selected from the group consisting of a data

amount, a transmission speed, a transmission route along which said transmission information

has been transmitted to said second terminal node, and a delay time of the packet transmission

along the transmission route to the second terminal node.

79. (Previously presented) The method according to claim 74, characterized by transmitting, from

said gateway to said second terminal node, an acknowledgment request packet including a

predetermined sequence number of a transmission packet which was transmitted but for which

no acknowledgement information has as yet been detected in said gateway, said acknowledgment

request message requesting from said second terminal node the transmission of an

acknowledgment packet acknowledging the receipt of the transmission packet having said

predetermined sequence number.

80. (Previously presented) The method according to claim 74, characterized by setting up a first

tunnel link between said gateway and said second terminal node and transmitting said

transmission information and receiving said acknowledgment information to and from said

second terminal node respectively through said first tunnel link.

81. (Previously presented) The method according to claim 74, characterized in that said ad hoc

network is a packet switched network, said transmission information comprises one or more

transmission packets, and said acknowledgement information comprises one or more

acknowledgment packets.

82. (Previously presented) A computer program product stored on a computer-readable medium,

comprising code sections for respectively carrying out the functions of the gateway in accordance

with claim 74.

83. (Previously presented) A computer program product stored on a computer-readable medium,

comprising code sections for respectively carrying out the functions of the terminal node in

accordance with claim 75.